Chapter 4

Organizational Design

The tools, techniques, and methods described in the previous chapter can be incredibly powerful to help unlock organizational agility. Yet, their relative effectiveness will be greatly affected by the context within which they are used. One of the influences of that context is Organizational Design. Without an Organizational Design that supports an end-to-end view of value creation, the technology deployed will have limited effect.

In this chapter and throughout this book, I refer to Organizational Design from two perspectives:

- The Physical Design of the Workplace: Here, I'm referring to the physical (and sometimes virtual) workspace within which people collaborate, communicate, and work together.
- The Organizational Structure of the Organization: Here, I'm referring to the way in which the organization coordinates its people, resources, and assets in an effort to create value in a sustainable manner.

Physical Workplace Design

Research has shown that the way our workplaces are designed has an outsized impact on our productivity, our ability to collaborate, and our engagement in the workplace. We'll explore this in more detail later. In this section, I outline why the workplace is so important for knowledge work. I also highlight some of the key elements of an effective workspace and provide a case study of how my team completely transformed the workplace at NAVTEQ from a traditional "cubicle farm" to a highly collaborative, energetic place to work. My hope is that this will inspire you to rethink the way you view your own place of work and look for ways to optimize it for human collaboration and communication—not for square footage, as is often the case.

Designing for Great Teams

The least common denominator in an agile enterprise is the team. Although each individual contributes to developing a great product, it is ultimately the team that is necessary and responsible for creating compelling user experiences. Given the importance of teams as an organizational unit, recognizing exactly what makes a team highly productive has been an important area of business research. For those of us who have been fortunate enough to have worked on a high-performing team, it's sometimes difficult to pinpoint precisely what made that team so productive.

Early in my career, I was fortunate to work as a software engineer on a team that created custom financial forecasting solutions for Hewitt Associates (later acquired by AON), an HR management consulting firm. We were a relatively small team of five people, and we were fiercely proud of the product we created. When our internal customers requested new features, we rarely took more than two weeks to develop, test, and deploy them in production. (This was as close to Continuous Deployment [CD] as we got in the early 2000s.)

Better yet, our internal customers enjoyed using the product. Almost every month, we'd get a note from an end user who'd express how he loved working on RevCast because it was so friendly and different from all the other impersonal systems he had to spend most of their time on every day. Remember, this was an internal forecasting system, not a consumer app; having users reach out to us like this was not common with these types of systems. But the users loved our product—and started talking about it. In fact, RevCast was so successful that when senior management wanted to move RevCast's functionality to a more established Enterprise Resource Planning ERP system (PeopleSoft), there was a near revolt among the financial analysts who refused to give up the flexibility, intuitiveness, and responsiveness of this home-grown application. RevCast prevailed and became the system of record for more than \$1.8 billion worth of business for several years in the early 2000s.

I've asked myself many times afterward why the team was so successful. Was it because of the personalities of the people on the team? Did our skills, knowledge, and abilities complement each other particularly well? Was it perhaps an extremely charismatic leader who made it all happen? Or was it simply luck?

The Science Behind High-Performing Teams

Alex Pentland, a director at MIT's Human Dynamics Laboratory, set out to find out exactly what made teams great through careful observation of more than 2,500 teams in a variety of industries. By using a set of sensors collecting more than 100 data points a minute and observing teams work together for up to six months at a time, he could correlate the way the teams worked with their respective outcomes. He found that what made teams successful was not so much the composition of the teams themselves or the content of what the teams were discussing, but *how* they were communicating with each other:

"...we've found patterns of communication to be the most important predictor of a team's success. Not only that, but they are as significant as all the other factors—individual intelligence, personality, skill, and the substance of discussions—combined" (Pentland, 2012).¹

Specifically, Pentland was able to identify three elements of communication that directly affected the degree to which teams were successful:

- **Energy:** The number and nature of exchanges between team members matters. More exchanges are generally better as long as they are relevant to the task at hand. Face-to-face exchanges are most effective; texting and email were found to be among the least effective forms of communication.
- Engagement: The degree to which communication exchanges are distributed among the team members is important (see Figure 4.1). More evenly distributed exchanges are found to be more effective than "clustering," where representatives of one role only communicate with others having the same role, for instance.
- **Exploration:** The degree to which people are engaging with members outside of their core group is critical. Consistently, higher performing teams are engaged more frequently with members outside their own unit—and demonstrate higher levels of creativity and innovation.

Although I could not put my finger on it at the time, the communication patterns identified by Pentland were exactly what I experienced as a team member of RevCast early in my career. Looking back, I remember that people remarked about an audible "buzz" when entering our workspace—we were working together on problems, exchanging ideas, and engaging in active problem solving. We never considered each other's individual roles as significant—we were merely team members with different

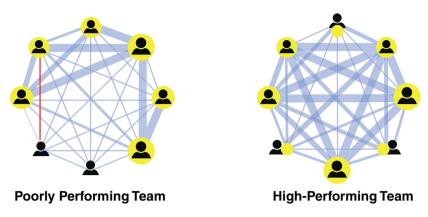


Figure 4.1 *Visualization of Communication Patterns on High-Performing Teams vs. Poorly Performing Teams According to Pentland's Research*

things to contribute. And perhaps because of the energy displayed by the team, we constantly had the opportunity to interact with people outside of our own group. These people helped us gain a more comprehensive perspective of the solutions we were building and allowed us to gain empathy with our stakeholders and end users.

Given the insights in Pentland's study and the obvious benefits that high-performing teams unleash, how can we create a workspace that increases the opportunity for team energy, engagement, and exploration?

Case Study: More Effective Collaboration Spaces at NAVTEQ

When I was leading the agile transformation at NAVTEQ in Chicago, we found that one of the key impediments to effective collaboration between and across teams was lack of an effective work space. Traditional "cubicle land" was simply not cutting it: teams reported that it was difficult to meet with each other on an ad-hoc basis. Pairing was next to impossible and constantly struggling to find available meeting rooms made face-to-face collaboration a challenge.

To alleviate these impediments, executive management supported our proposal to completely redesign our existing workplace. In the next section, I outline how we approached the problem, describe some of the lessons we learned, and provide examples of how the workspace evolved to better serve the needs of our teams.

The Working Agreement: Approach the Workplace from an Agile Perspective

As part of the agile enterprise transformation at NAVTEQ, I was leading the Agile Working Group (AWG), a team tasked with removing impediments to organizational agility. (More on the AWG in Chapter 8, "Building Your Organization's Agile Working Group.") We understood that we needed to dramatically change the office landscape, which was currently set up as traditional cubicles. Each person had his own little semi-private space, but this isolation was completely anathema to collaboration. We also understood that we did not know all the answers and that we needed to approach this project with an agile mind-set: we would learn along the way and modify our thinking as we uncovered more information.

We decided to collaborate with a workspace architecture firm. During the process, the architects consulted with us as external resources and provided expertise, ideas, and counsel as we built our agile workplace.

Phase 1: Design Agile Pod Prototypes

The AWG started our efforts by examining the current workspaces and gaining a deeper understanding of the problems the teams were encountering through in-depth interviews with team members, anonymous surveys, and observations from coaching. The themes that kept coming up were "lack of collaboration" and "communication challenges." Team members needed to work more closely together so they could make quick decisions based on high-bandwidth communication. The existing cubicle design made it difficult to work together effectively without having to schedule separate meeting rooms; however, this added a lot of unnecessary overhead and waste.

In cooperation with the architecture firm, we created a first set of prototype "Agile pods" designed to help address the problems of collaboration and communication. Figure 4.2 provides an early example of the design. The first set of prototypes was based on a variation of this general scheme.

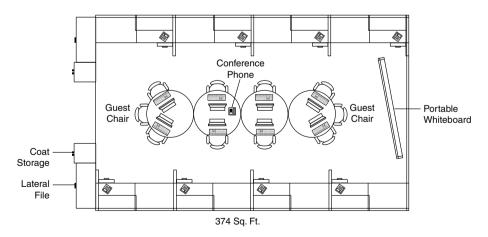


Figure 4.2 "Agile" Pod Design; Everything Inside the Space Is Moveable, Including Chairs, Tables, Whiteboards, and Video Screens

The design was created with a focus on flexibility, spontaneous collaboration, and the capability to bring in members from other teams on a moment's notice.

We asked for volunteer teams and set up four separate "experiments" on two different floors. Two of the teams were in 8-person pods, the other two were in 7-person pods. Because our company tried to keep the teams small as a general rule, this setup seemed reasonable: we felt confident we had optimized the work spaces for the factors that teams felt were important.

Phase 2: Run the Experiment—and Reveal Uncommon Learning

The four volunteer teams agreed to participate in the experiment under the following conditions:

- The experiment would last no more than three months.
- If the team members did not like the collaboration space, we committed to moving them back to their old work environment at the end of the experiment.

We decided that a time-boxed effort was indeed best. That provided employees with the option to go back to the current setup at the end, eliminating the risks involved with trying the new environment. In retrospect, creating this "safe-tofail" condition was a major reason we were able to get volunteers to sign up for our experiment.

As the teams moved into their new "homes," we made a special effort to celebrate their involvement publicly, half-jokingly comparing their efforts to the Apollo space mission some decades earlier. I say "half-joking" because we recognized it was no small feat to dramatically change employees' workspaces in this manner—especially when they could have continued working without any change at all.

Over the next three months, we interacted with the teams in a number of ways, collecting data to better understand the degree to which the agile pods were helping to increase team members' levels of collaboration, improve their communication patterns, and find new ways of working together. We collected the data by combining a number of sources: observation, surveys, periodic open space events, individual interviews, and objective data. (We even considered placing a time-lapsed video camera in the pod to observe communication patterns in the teams over time, but this was quickly rejected by the teams as if they were "in a zoo." Point taken.)

The data we collected came back remarkably consistent among the four teams. Unfortunately, it was initially very painful. To our surprise, most participants *absolutely hated* working in the new pods. They said they were noisy. There was virtually no privacy to make occasional personal calls. One volunteer was pretty clear in her assessment: "This is a hellish working environment; please change whatever you're doing and rethink the whole agile collaboration concept." The judgment was pretty clear: if the pods are going to look like this, they would rather quit their jobs than work in this environment!

However, there was some good news: teams *were* collaborating better. Communications were more effective within and across teams. We noticed there were a few times each week when we could observe the teams really gelling together—a few people from different teams got together for regular Xbox game nights at the office, and ad-hoc table tennis tournaments started popping up. We recognized we were onto something—but we knew we had to change some of the design decisions we made in the prototypes. We needed to amplify all the positive developments we saw related to increased collaboration and cross-team communications and dampen the issues related to noise concerns and lack of privacy.

Phase 3: Back to the Drawing Board—Optimizing for the Right Thing

Running these experiments was incredibly valuable. Without them, we would only have a theoretical idea of what worked and what didn't. Afterward, we had a vivid understanding of what we needed to change so that we could create a work environment for our people that not only enhanced communication and collaboration, but also respected their individual needs for privacy and focus.

In the end, the changes we needed to make to the pods from the original design were relatively small, but with one significant design difference: size. Our prototype pods reduced the amount of square footage used per employee. Team feedback showed us that to be effective, the pods needed to be bigger, and we needed to provide additional supporting rooms to complement them.

This insight changed the math of the physical workspace design effort: no longer could we argue that we could improve team performance *and* save on real estate costs. We now had to draw a line in the sand: if we couldn't have both, which was more important: team performance or square footage?

Upper management was clear that their commitment to the agile transformation was unwavering, and they approved the additional cost incurred by increasing the size of the pods and improving additional areas of privacy for team members.

The new PODs were bigger and provided additional space for "guests." They also were accompanied by additional privacy spaces that team members could use any time they needed to get out of the "bubble," focus on something for themselves, or have a private conversation (see Figure 4.3).

After making these changes and receiving positive feedback from the volunteer teams, we decided to roll out the redesigned PODs across all the teams in our R&D division, ultimately ensuring all of NAVTEQ's development teams were working in a more collaborative workspace.

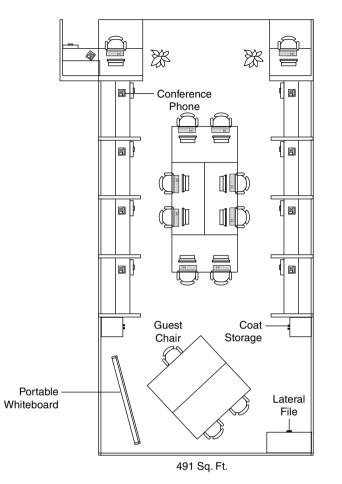


Figure 4.3 *Revised "Agile" Pod Design; The Increased Size Provided More Space for Team-Specific Items, Occasional Guests, and Activities Like Pairing*

What We Learned

Through this experience, we learned a few valuable lessons. Although the research was unequivocal that high-bandwidth communication does improve with a more collaborative workspace, we found that a few practical considerations needed to be considered when designing an agile workplace:

• **Provide Effective Focus Space:** Knowledge workers frequently collaborate and work together, but when deep focus is necessary, they need to be left alone so they can work in peace. This means that a workplace needs to accommodate both a satisfactory noise level and an appropriate amount of privacy. As

much as great products are created by teams, individuals also need space to concentrate their efforts when working heads-down on deep problems.

We approached this need by raising the walls of the agile pods to about 6 feet so that the teams could focus without noise interruptions from other teams. We found that "noise" coming from people working on the same project was not disruptive; conversations regarding work that had nothing to do with the current work was.

In addition, we installed a number of "privacy booths" outside the agile pods. These could be used by anyone at any time, without scheduling. This made it possible to have spur-of-the moment private conversations with a spouse, for example, or a space to focus on deep problem solving for a few hours.

• Create Opportunities for Collaboration Without Sacrificing Focus: Pentland's research shows us that successful teams collaborate with members outside their own core units, but the places where collaboration happens can vary. Designing to include more public spaces can create meaningful collaboration opportunities.

Steve Jobs famously made sure the bathrooms at Pixar's offices were set up in such a way as to increase opportunities for "serendipitous personal encounters." He believed that having people from different and diverse teams meet each other under unplanned circumstances helped spur innovation, inspiration, and creativity.²

• Support Effectiveness Through Flexible Options: Although we recognize that face-to-face conversations are superior methods of communication, knowledge workers value workplace flexibility above all else. Given the distributed nature of workers today, it is important to build flexibility into the design of the workplace. This means that the office space itself needs to be malleable and open to virtual communication technologies.

For instance, Intel has built co-working spaces throughout its campuses worldwide so that people can just as easily work in semipublic spaces bustling with colleagues as they can in private, two-person task rooms. Having options allows for flexibility. People can enjoy the buzz of a creative space when needed and take advantage of solitude when deep concentration is more appropriate. The key element of this workplace design strategy is choice: employees get to choose which environment they want to work in based on their personal work needs and the specific nature of the work itself. One size does not fit all.

This flexibility extends to another option: not working in the office at all. Working remotely is becoming increasingly more important, especially in tech. Remote work is a key enabler to gaining access to the very best talent, regardless of where they reside in the world. In light of this, some companies are choosing to go completely virtual, with people working from all corners of the world and coming together in virtual meeting rooms on a regular basis.

Note

Jurgen Appelo, a top innovation thinker, notes that the mental alignment between team members is just as important—if not more so—than the physical location of the team. When people share a common purpose and align around a welldefined cause, the physical workspace of the team members becomes less important for achieving positive work outcomes.

Although I'll argue nothing beats face-to-face communication, the reality of today's distributed organizations is that this is not always practical. I've found virtual teams to be quite effective—as long as the technical infrastructure enables seamless information exchanges and you allow for periodic face-to-face interactions on a regular cadence.

True, your travel budget is likely to be affected when having a highly distributed team; creating a high-performing virtual team isn't free. I've found that coming together on a regular cadence—ideally, every 3–4 months—is essential to creating the type of mental alignment Appelo refers to in the preceding sidebar. (For more ideas on how to support virtual workplaces, check out the companion website: www.unlockingagility.com/.)

The Human Impact of Effective Workspaces

The co-location effort at NAVTEQ was a significant success. In less than six months after the teams had moved into their new workspaces, defects in production were down by more than 60%. The time it took to complete critical issues improved 2.5 times, and teams were delivering with more predictability and confidence.

Perhaps most important of all was the fact that our employee engagement scores increased. Although there were a few adjustments made along the way (additional footrests, mini-fridges, Xboxes for sporadic team building, and so on), the general consensus among our employees was that this was a huge improvement and that working together was easier and more—dare I say it?—fun.

For me, the most meaningful proof of our success was reflected in an exchange I had with one of our top engineers, Kevin. A few months after the office redesign, he took me aside, smiling, to share some exciting personal news: he had received an offer from Google.

I wasn't sure how to feel. I was happy for Kevin; Google was a great opportunity. But I was also profoundly sad that we would be losing one of our best engineers, someone I cared about a great deal. I managed to respond with something that must have resembled a combination of a frown and a smile.

"I turned them down," Kevin said. He looked at me and smiled even wider. It took me a few seconds to realize what he'd just told me: he'd turned down Google to stay with us. "I realized I don't want to leave this place. I love my team, we're working on really amazing stuff, and I want to be part of this journey we're on!"

In that moment, it became clear to me what an impact organizing the workspace had made to our people. By designing a workspace that took into account what our people were telling us and recognizing the patterns inherent in effective communication and collaboration, we had made NAVTEQ a better place to work. This was not about moving a few tables around and adding some plastic flowers to improve office optics. This was real. It was substantial. And it was meaningful. Did creating this agile working space cause higher performance and a better working environment? I can't prove that there was a causal relationship—and it's likely that there were many other factors contributing to improving work at NAVTEQ. But was it one factor contributing to having one of our top engineers choose to stay with us and being part of our journey? Of that, I have no doubt.

I gave Kevin a warm hug, unable to speak a single word.

Organizational Structure

Organizational Design goes beyond physical workspaces. How a company manages its people, assets, and resources also has a significant impact on how a company creates value. As we illustrated in Chapter 2, whether an organization optimizes for resources or flow (whether consciously or not) will have wide-ranging effects throughout the company.

That's not to say that there is any one "right" way to structure a company. Depending on the business context in which the company operates, one given structure may be more advantageous than another. As we've learned, knowledge work requires different structures than what we may need in environments where we're looking to decrease variance, lower per-unit costs, and utilize resources to the fullest. Some specific organizational patterns are more appropriate than others when it comes to embracing uncertainty, executing with purpose, and creating an environment characterized by robust employee communication and collaboration.

In this section, we'll first describe some of the most common organizational structures companies deploy and point out some of the benefits and challenges associated with each of them. We'll then highlight a few nascent structures that have gained traction over the past few years.

We'll conclude the chapter by presenting an example of an agile Organizational Design that is currently gaining a great deal of momentum, and for good reason: it's currently working for HERE, Spotify, and ING.

Functional Structure

The functional structure is the most common organizational structure in use today, and it has its roots in the management theories we discussed in Chapter 2. As the name implies, a functional organizational structure is optimized for each function within the company; for example, below the top tiers of administration you might have a Production department, a Marketing department, an IT department, and so on, as pictured in Figure 4.4.

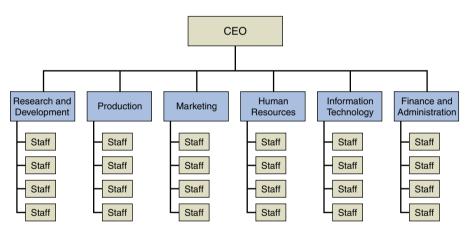


Figure 4.4 Example of a Functional Organizational Structure

Each function in this type of organization is run by a *functional leader* who is responsible for managing her respective staff and ensuring her function runs optimally. Given that the focus of each function is to specialize in a given area of expertise, the people within each function tend to share similar skills, knowledge and abilities.

Because of this structure, there is a rather large difference between the various functions in the organization: having people change roles from marketing to information technology happens rarely, for example, because each function has its own culture. In extreme cases, it may even be viewed as an organization inside an organization.

Benefits

Functional structures optimize for resources and reduce per-unit costs. They increase efficiencies and facilitate a high degree of control.

Also, staff within each functional area has a clear career path. As employees gain experience in their field, they advance from junior to more senior roles within their specialty. This means the level of knowledge within the particular function is typically quite deep: the more senior employees can have 30+ years of experience.

Drawbacks

Although the functional structure facilitates deep areas of knowledge within the company, it also creates distinct silos and makes collaboration between specialty areas difficult. Having this clear delineation and separation has a tendency to slow down decision making and makes adapting to changing market conditions challenging.

People working in companies with functional structures also typically struggle to see the "big picture" of how an organization creates value for its customers. Because their work rarely involves people outside of their functions, employees tend to be limited to a customer view dominated by a functional perspective. For instance, if you happen to work in the Quality department and focus purely on this perspective, you may only notice the number of defects and "bugs" reported by customers, while the more substantial issues preventing higher uptake may be related to poor user design or responsiveness.

The Takeaway

A functional organizational structure, while popular, is becoming increasingly undesirable in an environment characterized by Volatility, Uncertainty, Complexity, and Ambiguity (VUCA). Due to the inherent limits of this structure as it relates to adaptability, speed of execution, and customer focus, companies that benefit from this structure are those that operate in stable, highly predictable environments. Government institutions, manufacturing organizations, and religious institutions are examples of organizations that may leverage this structure with some success, although these areas are no longer as stable as before.

Divisional Structure

A divisional structure is used more often in larger companies that span a wide geographic area or support multiple lines of business and products under a common corporate umbrella, as illustrated in Figure 4.5. In a divisional organizational structure, each division operates semi-autonomously to produce a service or product. Each is headed by its own executive responsible for running the division as a separate business. For example, a bank leveraging an organizational structure may have separate divisions for retail, wealth management, investment banking, and so on.³

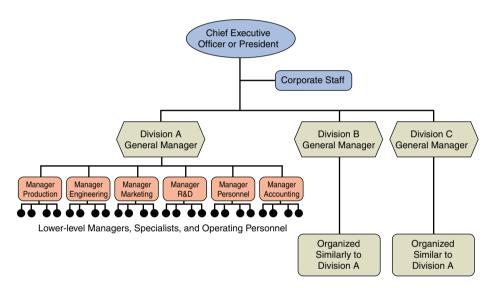


Figure 4.5 Example of a Divisional Organizational Structure

Benefits

The head of the division, typically a VP or general manager, is responsible for hiring, overall budgeting, and sales/marketing for the respective division. Having a clear line of ownership is advantageous because all resources necessary to produce value for this particular product or service are focused on a common goal.

Contrary to a functional organization, where there is constant competition for access to central resources, the divisional structure have its own functions and therefore supports a more product-centric way of running a business.

In my experience, companies with a divisional structure typically move faster than functional organizations. They can change strategic direction more rapidly and with a higher degree of customer focus.

Drawbacks

Divisional structures can be powerful, but they have their distinct disadvantages. Communication between the divisions often suffers as each unit is run more or less as its own organization within the company.

This structure can also be expensive because there is duplication of functions inside each division. For example, just as the Retail division will have a marketing function, so will the Investment Banking division. This duplication of effort can add a lot of overhead.

Perhaps more crucially, the divisional structure tends to create unhealthy competition and negative politics between the various divisions. Because each division competes for the same resources from the corporate level, there is little incentive to collaborate between the divisional heads, and this tends to drive a short-term, narrow view of the business as a whole.

The Takeaway

For larger companies with operations in multiple locations across the world, a divisional structure may make sense. Having a division in Asia run semi-autonomously from a sister division in Europe can serve the company well because the needs of the customer base in each geography may be different and require custom ways of operating.

Although more suited to deal with today's complex business environment than the functional structure, one potential drawback of this way of organizing is that without strong leadership and alignment at the top, the semiautonomous nature of this structure can lead to divisional factions and misalignment on a global level. For instance, a customer's experience of one brand in the U.S. might be very different with the same brand in Europe, if the same brand is operating independently. This can create negative brand perception and customer confusion.

Matrix Structure

A matrix structure can be viewed as a combination of the functional and divisional structures. Whereas the functional structure optimizes for a given function and a divisional structure optimizes for a particular product, geography, or line of service, a matrix structure aims to marshal a company's resources and assets toward a common goal, as illustrated in Figure 4.6.

Benefits

One of the key benefits of a matrix organization is that it drives an increased level of collaboration and communication across the organization. People are not tied to a given function or a product line; instead, people work across boundaries to accomplish the same goal, regardless of where they may reside in the org chart.

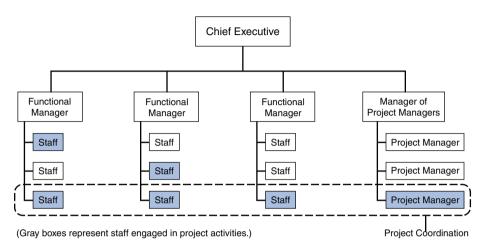


Figure 4.6 Example of a Matrix Organizational Structure

Also, because employees are working in an environment where managers are not defining the way things are done, there tends to be a relatively high level of autonomy and employee engagement in matrix structures. Consulting firms are often set up using a matrix structure where employees may have a formal "people manager" who is separate and distinct from the "client engagement manager" who may direct their day-to-day work activities.

Drawbacks

The main drawback of the matrix organizational structure is that employees are supervised by multiple managers at once. Because employees are managed by both a "people manager" (who may be responsible for their career path and growth) and a "product manager" (who defines the goals they are working on), employees in matrix structures often report feeling conflicted and confused regarding which priorities to follow. "Do I work on improving a certain process, or do I spend my efforts working on a product deliverable?" Both are important—the former concerns improving how we work while the latter addresses customer needs—but one of these needs to be prioritized higher than the other. Both can't be equally important.

Having a single manager would help in terms of gaining clarity. With two managers —each coming from different perspectives—you may be faced with delivering two work items, both being number one on the priority list.

Also, because employees are typically working on multiple goals at once (each with its own set of managers and other stakeholders), the matrix structure brings with it significant complexity and overhead, requiring excessive coordination and dependency management. I worked in a matrix organization earlier in my career and experienced some of the challenges firsthand. For instance, my "people manager," who was ultimately responsible for defining my financial rewards and career recognition, would sometimes disagree with my "product manager," whose goals I was assigned to help achieve. As an employee, these situations could be uncomfortable; do I follow my people manager, who wants me to help redesign our existing workflow so we can be more effective in the future, or do I follow my product manager, who wants me to focus more on immediate feature deliverables? When management was well aligned, this type of structure worked well. When it was not, it tended to create conflicts and office politics.

The Takeaway

The matrix structure may at first appear as if it combines the best of the functional and divisional structures. However, when used in larger organizations, many of its inherent benefits disappear amidst complexity and coordination between conflicting managers and goals.

For smaller organizations (< 150 people), this structure may work quite well, but as the organization moves beyond a few hundred people, the matrix structure tends to be less effective—both for executing in an efficient manner and adapting quickly to changing business environments.

Emergent Organizational Structures: Sociocracy and Holacracy

The organizational structures discussed in the preceding sections are well established and have been in place in some form or another since the concept of the modern corporation was introduced in the 19th century. The business environment has changed dramatically since then, however, and some organizational structures have emerged that aim to better support a more human-centric, adaptable organization. Two of the most popular emergent structures are Sociocracy and Holacracy. In the following section, we'll describe these structures and highlight some of their differences. We'll also highlight some of the challenges associated with each.

Sociocracy

The term *Sociocracy* comes from the Latin and Greek words *socius* (companion) and *kratein* (to govern). Sociocracy aims to put people first and considers all employees to be equals. In contrast to the more traditional organizational structures we

discussed earlier where there is a single decider at the top, decision-making in Sociocracy is based on consensus—the notion that a group of individuals can get behind a decision together without objections.

Gerard Endenburg, an electrical engineer, is credited with defining the modern version of Sociocracy we know today. Combining ideas from the Quakers' consensus principles with his understanding of engineering and systems thinking, Endenburg defined an "operating system" of decision making and collaboration through a set of hierarchical circles—each corresponding to a department of an organization.

In this structure, policy decisions require consent of all members of the circle. Regular decision making is made by the operations leader within the policies established in circle meetings. If other circles are affected by a decision, then a circle of representatives from each affected circle is empowered to make the decision. By linking circles and making decisions by consent, efficiencies are preserved while maintaining equality for the circles and the people in them (see Figure 4.7).⁴

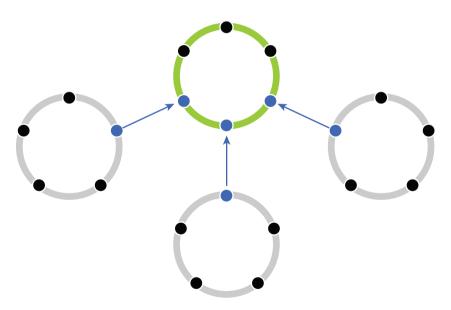


Figure 4.7 An Example of a Sociocracy Organizational Structure. Representatives from Various Circles are Empowered to Influence Decisions that Affect Them. Decisions are Made by Consensus.

Holacracy

Although influenced by Sociocracy, Holacracy is a more recent innovation and is based on Brian Robertsen's organizational experiments at Ternary Software, where he wanted to explore more democratic forms of governance. Robertsen first defined Holacracy as a concept in 2007 and later codified it with definitions of practices and principles in his 2010 manifesto, "Holacracy Constitution."⁵

A central idea in Holacracy is the focus on roles. A role is not a job description in the traditional sense; it is a definition of the purpose, span of control, and accountabilities involved in getting work done. This means a person in an organization can take on multiple roles; he is not solely dedicated to one purpose, as in a Sociocracy.

Holacracy also leverages the circle-based decision model, but it is more selforganizing and less self-directed than in Sociocracy. In Holacracy, decision making is more hierarchical; circles are connected by two roles known as "lead link" and "rep link," which are accountable for alignment with the broader organization's mission and strategy. If there is a potential conflict between circles, the "lead link" gathers input and feeds this into existing roles so forward momentum can be made. The roles are empowered to do everything possible (within legal and ethical limits) to achieve the goals defined for them. Advocates of Holocracy therefore claim a bias toward action and autonomy—more so than with Sociocracy. A person whose role is "Community Liaison" is empowered to make decisions within her area of responsibility without conferring with others in her circle, for instance. Sociocracy would encourage a more consensus-based approach.⁶

Benefits

One of the key benefits of Sociocracy is that everyone in the organization feels included, and their voices are represented in decision making. This structure also helps create trust among the employees and a strong sense of working toward a common purpose.

It is perhaps not a coincidence that Sociocracy has been adopted quite successfully in nonprofit, religious, and cohousing communities—organizations that thrive on empathy and common understanding among constituents.

Holacracy shares many of the same benefits and places a high degree of emphasis on personal accountability and actions. Compared to Sociocracy, in Holacracy, there is increased focus on defined roles and their ability to make decisions, and there is less focus on group consent. Yet, by emphasizing self-organization, an organization leveraging Holacracy should be more adaptable to change and more apt for a world where environments are fluctuating widely.

Drawbacks

With its focus on equality and transparency, Sociocracy will appear quite radical to businesses accustomed to operating with top-down decision making and needto-know information-sharing policies. The corporate culture required to make Sociocracy work can also be alien to multinational companies accustomed to driving strategic direction from headquarters rather than having decision making happen organically within a group of employees viewed as equals. Most implementations of Sociocracy known today are of small-to-medium organizations; larger enterprises have yet to adapt this model.

Holacracy has had a few high-profile adaptations, notably Zappos and Medium; however, both implementations have been challenging, to say the least. Medium ended up abandoning Holacracy after a few years because of challenges related to cumbersome coordination for larger product development efforts. In addition, the rigorous and detailed nature by which the roles and policies were defined ended up hindering personal ownership and initiative.

Zappos' Holacracy efforts are still ongoing, but the company has generated some high-profile negative attention as a double-digit percentage of people left the company when CEO Tony Hsieh posed an ultimatum asking employees to commit to Holacracy or leave. It is too early to tell whether or not Zappos' Holocracy effort can be called a success or a failure, but it is clear that it has been an extremely challenging transition.⁷

The Takeaway

Sociocracy and Holacracy are genuine innovations in Organizational Design. Although it's difficult to implement, there are examples of smaller organizations that have been able to adapt this way of operating with success. The Morning Star Company, a maker of tomato products, has been leveraging Holacracy for some time, as has Valve, a developer of software gaming platforms. These are relatively small companies, however.

For larger corporations, these governance structures still appear too immature and risky to constitute a pragmatic alternative to one of the traditional Organizational Designs discussed earlier. Although there is a lot to like—self-organization, consensus-building, transparency—the cohesive cultural environment, leadership maturity, and communication structures necessary to make these designs work in large enterprises may not be there yet.⁸

An Agile Organizational Structure?

After exploring these organizational structures at a high level, where does this leave us? The formal structures we discussed earlier are rooted in traditional, plan-driven ways of running a business; they optimize for resource control and compliance rather than speed and agility. And the modern structures we looked at optimize for selforganization and personal fulfillment but do not confidently address customer needs and a changing business environment. What, then, is an Organizational Design that supports business agility?

The short answer is that there is no one "correct" Organizational Design. Rather, an agile Organizational Design is dynamic, flexible, and ultimately optimizes for customer value (present and future) rather than resources or leadership control. In the next section, I outline the Organizational Design I was involved in creating at HERE and cover the highlights of an organizational setup at ING (greatly inspired by Spotify), a Dutch financial institution that has been making some innovative organizational changes.

Optimizing for Value: Organizational Design at HERE and ING

When HERE (formerly NAVTEQ) started its agile transformation in 2009, the initial focus was on implementing Scrum (and in some cases Kanban) to boost teams' ability to deliver software faster, with higher quality, and with more transparency. Over the course of several months, the Agile Working Group (AWG) and the coaching staff trained teams, empowered Scrum Masters, and gave Product Owners the authority to own their respective Backlogs to prioritize work. By all measures, the initial efforts were a significant success: quality improved significantly, teams delivered value faster, and management had more visibility into what was delivered over time.

But everything was not all roses. Part of the reason the teams were doing so well was that they were doing quite poorly before due to a bogged-down, highly bureaucratic process that had been imposed on the teams a few years earlier. The relative improvement was significant, but still not enough to be competitive with more nimble competitors entering the marketplace.

Perhaps most troubling: The teams were starting to operate more as silos, making it difficult not only to integrate code as teams prepared to go to production, but also to appear to the customer as a cohesive end-to-end product. For instance, one team would be working on a radically different way to process map data throughout the vast database of Points Of Interest (POI), yet the teams responsible for collecting POIs in the first place had no way to migrate their information to the new process engine—the data structures, the type of data involved, and the overall process were not aligned. The teams were operating as individual units, not as part of a cohesive effort aligned around a common goal.

The coaching team recognized that the root cause of the problem wasn't so much that Product Owners and ScrumMasters weren't coordinating enough—they had daily Scrum-of-Scrums and Communities of Practice in an effort to do just that—but that the teams needed a more appropriate Organizational Design. Rather than having teams operate under the existing organizational structure, working for a given divisional lead, the coaching team tried organizing the teams under a common goal instead. For instance, for Next Generation Map Building (NGMB), teams involved in these efforts—regardless of where they may initially belong on the org chart came together to solve that problem.

The new structure was entirely aligned around value creation; people organized around a common mission that was led by a Chief Product Owner, typically a senior director or a VP. Teams formed more or less organically to help deliver on this goal and upper management decided the relative size of the program based on the priority of the effort. Mission-critical efforts received more oxygen than initiatives that were not deemed as strategic.

The results were dramatic: teams became more aligned around shared goals, miscommunications and misunderstandings decreased, and customers received a more cohesive product experience. The change was probably more challenging for middle management than anyone else. Reporting relationships was no longer the primary source of power and influence; rather, the ability to deliver customer value became the most important factor managers were held accountable to.

Agility at ING

Another similar example took place in the Netherlands. The Dutch banking group ING was doing great financially, but leadership understood that the business environment around them was changing fast.

"Customer behavior...was rapidly changing in response to new digital distribution channels, and customer expectations were being shaped by digital leaders in other industries, not just banking," Bart Schlatmann, CIO of ING states in McKinsey Quarterly.⁹

Leadership realized that ING was no longer competing against other banks—it was being compared to the performance of other, more nimble technology companies. To learn more, ING executives decided to visit tech companies like Google and Spotify to better understand what made these companies so adaptive and responsive to customer expectations. One of their epiphanies was the way the companies organized around value. Schlatmann continues:

"The key has been adhering to the "end-to-end principle" and working in multidisciplinary teams, or squads, that comprise a mix of marketing specialists, product and commercial specialists, user-experience designers, data analysts, and IT engineers—all focused on solving the client's needs and united by a common definition of success."

ING was particularly inspired by Spotify, the Swedish streaming service that described its own organizational model in 2012 in a paper by agile consultant

Henrik Kniberg and Spotify internal coach Anders Ivarsson.¹⁰ After visiting Spotify and admiring its organizational structure in action, ING decided to organize itself through a number of Tribes (to use Spotify's terminology), each responsible for an overarching business objective. Each Tribe consists of several Squads—small groups of people (no more than nine) dedicated to working on a given end-to-end solution. Each Tribe is led by a senior executive who is responsible for strategic direction and financials. Each Squad's direction is then owned by a Product Owner. To facilitate cross-team collaboration and alignment on technical capabilities, each Squad has a Chapter Lead who meets with other members of the chapter on a regular basis to keep everything in synch (see Figure 4.8). The Chapter Lead is also the people manager for the persons in the Chapter. A Chapter Lead should have people in her chapter spread across various squads; this prevents the conflicts sometimes seen in matrix organizations. The PO is responsible for what happens (prioritization) and the Chapter Lead is responsible for a standard way of work for the experts within her particular expertise area (the Chapter).

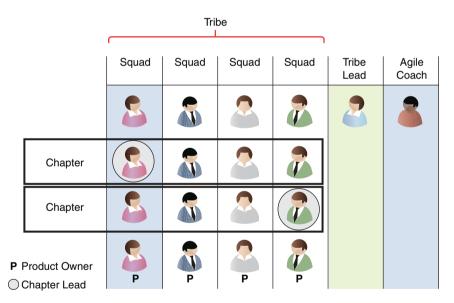


Figure 4.8 ING's Tribe Organization; Inspired by Spotify

There are quite a few similarities between this and the model described earlier with HERE. Both models share characteristics we noted earlier, with formal and informal structures. For example, this model shares elements of self-organization with both Holacracy and Sociocracy. Embedded in these models are elements of hierarchy as well: although the "how" is left up to the teams (with informal controls provided by the Chapters), the "what" in the form of business objectives is clearly defined from executive levels.

These structures are aiming to strike a careful balance between flexibility and reliability. By allowing people to have more autonomy within clearly defined boundaries of responsibility, Spotify, HERE, and ING are able to respond faster to market changes while delivering on customer commitments predictably. Although none of these companies claims to have achieved a "perfect Organizational Design"—they are always evolving and improving—these structures have proven to be more effective ways of managing work in environments characterized by rapid change. One indication that this way of working is bearing fruit: while the initial efforts at ING described above were limited to the organization in The Netherlands, senior leadership was so impressed by the results that the entire company is moving in this direction, implementing a similar structure in offices across the company worldwide.¹¹

Heuristics of Agile Organizational Designs

Organizational Designs have shown they are more adaptive than traditional approaches of organizing work. They support faster delivery and keep people engaged so they perform at higher levels and create better products.

To gain value from what we've observed in these structures, it is instructive to look at the core heuristics they demonstrate rather than the particular details of each model:

- An end-to-end perspective with the customer in mind: Agile Organizational Designs optimize for flow. Internal handoffs and the distance between teams who develop product and the customers who receive it are minimized.
- Self-organization toward a common purpose: Developing software is a complex endeavor, and requirements will emerge over time. As such, the people required to develop the solution will also change organically and will self-select to assume work that takes on increased organizational importance.
- A dedication to continuous improvement and technical excellence: Software craftsmanship and a culture of engineering excellence are common in agile organizations. Because software code needs to be accessible to a broad set of people, it is important to write code in a way that is understandable for everyone and can be tested quickly and with confidence.

• Empowering people to make and meet commitments: The executives in agile organizational structures are very much involved in defining the strategic direction of the company. They define the "what." The team members define the "how" and make their own commitments about when the solutions can be delivered.

Although there is no one "right" Organizational Design that will magically inject agility into your organization, you can align your operational strategy and design so that it supports the realities of the business environment you're in. This means that copying and pasting the models used at Spotify, ING, or HERE is not a helpful way to unlock agility in your organization—but understanding the reasons *why* these structures worked in the context of their organizations is.

If you're operating in a business characterized by relatively high levels of stability, such as defense contracting, starting with a more traditional Organizational Design and looking for ways to inject more employee autonomy may be a rational approach to pursue. However, if you're operating in an environment where volatility is not only common, but accelerating (as we're seeing in most industries today), it may be wise to look to more flexible designs first and then create boundaries and well-defined interfaces where appropriate.

Organizational Design is a critical part of unlocking agility in the enterprise. By aligning both the physical workspace as well as the organizational structure so that your people can produce value faster, respond to change quicker, and do their best work, the organization as a whole will be better suited for a VUCA world.

In Chapter 5, we turn our attention to the next success factor in unlocking agility, a factor without which little work could be done at all. That factor is People.

Summary

This chapter covered Organizational Design. For the purposes of this book, this is defined as the physical and virtual workspace within which people collaborate and the structure by which people are organized to create value. We explored research identifying key characteristics essential for high-performing teams and detailed a case study where a company took an intentional approach to creating an agile workspace environment. Although not a recipe, we summarized a few key elements associated with effective agile workspaces.

We then listed a few of the most common organizational structures in use today and detailed benefits and drawbacks of each. We looked at a few companies' efforts to build a more agile structure: Spotify, HERE, and ING in particular. We closed the chapter with some key heuristics to help design more agile organizational structures and unlock agility in the enterprise.

Q&A

1. Why is there no one perfect agile Organizational Design?

If you were looking for a simple solution—"just do this organizational structure, and you'll be agile"—you might be disappointed by this chapter. In fact, even the Organizational Designs I detail in the chapter most likely will have changed by the time you read this. As part of the research for this book, I spent time with Anders Ivarsson, the Spotify employee who wrote the initial snapshot of the Spotify model with Henrik Kniberg back in 2012. Asked on his view of the Spotify model and how it has affected the discussion on agile at scale, he was unequivocal: "There really wasn't a 'Spotify model' in the first place—we just documented what we had at the time to illustrate how we organized our work; it was never meant to be a static model. It sometimes concerns me that some people think this is the one way to organize if you want to be more agile."¹²

Ivarsson's point is well taken: it wouldn't be very agile to implement a snapshot in time (what may indeed have been a good approach for that context) and expect this to simply be the answer to future challenges. One of the key themes of this book is that unlocking agility means being aware of your context and adapting accordingly. Instead of striving to find "the perfect organizational structure," it is more important to be open to trying new models, mixing in learning from existing models, and finding a structure that works for your organization and your business strategy. In fact, that's how Spotify's model came about in the first place. If you take a closer look, you'll notice elements from matrix structure, divisional structure, and even some functional structure elements sprinkled in-together with self-organization often associated with Sociocracy. What made Spotify's model work for the company then is not what it looks like today. Since 2012, Spotify has grown tremendously. Although some of the same structures still remain (tribes, chapters, and so on), there are now additional layers, roles, and more structure added to accommodate a different context. And it's still evolving.

So does this mean there are lessons to be learned, that simply "trying whatever you'd like" is the way to go? Well, not quite. Although there may not be a simple solution, that does not mean there is not meaningful guidance that can help you on your way toward a more agile organization. The four simple heuristics I outline at the end of this chapter are central to all agile organizational structures I've seen, regardless of size, industry, or type of organization.

2. There's a lot of emphasis on face-to-face communication in agile organizations. What about working from home and the concept of fully virtual organizations?

Indeed, the very first value in the Agile Manifesto spells out "individuals and interactions over processes and tools." And the research I did for this book as well as my own experience—indicates that, all things being equal, it *is* more effective for team collaboration and communication when people work together, in a shared physical space, than it is being virtual. The information we convey through subtle facial expressions, body posture, and even changes in the tone of our voice is not easily picked up in a virtual medium—and it matters. Companies have caught on to this. There is a distinct trend—even among hot tech companies—to invest more in physical workspace designs to make them more attractive for employees to stay at work and interact with their colleagues. Some companies go as far as outright banning the practice of working from home altogether. (That's not necessarily something I'd recommend as a policy, mind you.)

That being said, everything is *not* always equal. Some work benefits from solitude; interactions with others can break deep concentration and be harmful. Employees can gain peace of mind and focus when they know they are available to take care of an aging parent or sick child at a moment's notice. There are people with unique skills, knowledge, and abilities that your company may need—but who may not be looking to move to the town where your company operates. I think you see where I'm going with this.

Yes, humans tend to collaborate better when they share the same physical space. But in the face of real constraints, it is advantageous to take a more pragmatic approach to working together. Here's what I've seen to be effective:

Clarify that although there is a *preference* for face-to-face collaboration, working virtually is perfectly acceptable as long as the team can work out the constraints. This might mean that we meet outside of regular office hours at times, we upgrade the network infrastructure to increase our bandwidth, we invest in better virtual meeting software and cameras in our home office, and so on. And we still meet face to face on a regular basis, but perhaps not all the time. Employees at Paylocity, a successful payroll company based outside Chicago, routinely work from home 2–3 days each week; this balance and flexibility is part of what helps them recruit great talent in a fiercely competitive job market. What about fully virtual organizations, where there are no offices at all? In this case, I've still found it helpful to come together as a team once every 2–3 months or so. In fact, I drink my own champagne in this regard: Comparative Agility, where I work, is a fully virtual company with offices in Oslo, Sarajevo, and Silicon Valley. We still meet face to face every quarter or so, however. We try to always change venues—one time it's Berlin, the next it's London, and then Oslo, and so forth—but getting together for a few days every quarter has proven to be very helpful for us when we discuss larger features, articulate and shape our strategy, or simply want to have fun together as a team.

What works for your organization may be different; there is no easy answer here. The point is to recognize the constraints involved in embracing certain approaches while dampening the negative consequences and amplifying the good. And if something is not working—change it. Again. Until it works. Then keep improving.

Further Resources

The following are resources I recommend you explore further to gain a deeper understanding of the topics discussed in this chapter:

• Kniberg, Henrik and Ivarsson, Anders. "Scaling Agile at Spotify with Tribes, Squads, Chapters and Guilds." 2012. https://blog.crisp.se/2012/11/14/ henrikkniberg/scaling-agile-at-spotify

An easy and enjoyable read—and quite important. Kniberg and Ivarsson captured a snapshot of how Spotify approached an agile organizational structure in 2012, and many took it as gospel. There are lots of great lessons to be learned here; however, the underlying principles for why they did what they did, and how they approached employee autonomy and company alignment, for instance, are excellent. This resource is well worth your time!

• Eckstein, Jutta and Buck, John. Bossanova: Company-Wide Agility with Beyond Budgeting, Open Space & Sociocracy. 2018. https://leanpub.com/ bossanova

Eckstein and Buck are giants in their respective fields of agile thinking and Sociocracy. When they had a chance to come together and discuss the challenges facing organizations today, they found that many of the same themes resonated with them. As a result, they decided to join forces and share their collective knowledge in their book *Bossanova*. It's an informative read bound to give you insights you can use in your own transformation efforts. Pentland, Alex "Sandy." "The New Science of Building Great Teams." April 2012. *Harvard Business Review*. https://hbr.org/2012/04/the-new-science-ofbuilding-great-teams

This is the *Harvard Business Review* article summarizing the findings I refer to in the text above. Pentland was able to use sensors and empirical data to look at communication patterns and how people collaborate in teams. It's a fascinating study that is fairly unique, at least in terms of knowledge work.

https://www.gensler.com/research-insight/workplace-surveys

I don't intend to promote companies or brands in this book, but Gensler is a workplace architectural firm I have a lot of respect for that offers its own findings to the public. Their annual workplace surveys are as informative as they are beautifully designed; they're worth your time if you want to know more about trends in workspace design.

Footnotes

- Pentland, Alex "Sandy." "The New Science of Building Great Teams." April 2012. Harvard Business Review. https://hbr.org/2012/04/the-new-science-of-buildinggreat-teams
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- [5] Robertson, Brian. "History of Holacracy." https://blog.holacracy.org/history-ofholacracy-c7a8489f8eca
- [6] Hoglund, Jan. "Holacracy vs. Sociocracy." http://janhoglund.eu/holacracy-vssociocracy/
- [7] http://fortune.com/zappos-tony-hsieh-holacracy/
- [8] Eckstein, Jutta and Buck, John. "Company-Wide Agility with Beyond Budgeting, Open Space & Sociocracy." 2018. https://leanpub.com/bossanova

- [9] McKinsey Quarterly. "ING's Agile Transformation." 2017. https://www. mckinsey.com/industries/financial-services/our-insights/ings-agile-transformation
- [10] Kniberg, Henrik and Ivarsson, Anders. "Scaling Agile at Spotify with Tribes, Squads, Chapters and Guilds." 2012. https://blog.crisp.se/2012/11/14/ henrikkniberg/scaling-agile-at-spotify
- [11] Abelen, Eric (ING). Conversations and email thread. December 2017; January 2018.
- [12] Ivarsson, Anders (Spotify). Conversations and email thread. December 2017; January 2018.